



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/586,455

07/18/2006

Nobuyoshi Nambu

4991-0112PUS1

4706

2292 7590 08/04/2009
BIRCH STEWART KOLASCH & BIRCH
PO BOX 747
FALLS CHURCH, VA 22040-0747

EXAMINER

NGUYEN, HAIDUNG D

ART UNIT

PAPER NUMBER

1796

NOTIFICATION DATE

DELIVERY MODE

08/04/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary	Application No. 10/586,455	Applicant(s) NAMBU ET AL.	
	Examiner Haidung D. Nguyen	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 July 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-16, 18 and 20-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14-16-, 18, 20-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/23/09 has been entered.

2. Claims 14-16, 18, 20-29 are currently pending.

3. Claims 14-16, 18-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sobkin et al. (6,555,600) in view of Lozano et al. (6,033,599). This rejection is withdrawn in view of applicant's amendment.

4. Applicant's arguments with respect to claims 14-16, 18-29 have been considered but are moot in view of the new ground(s) of rejection.

5. Note the following new grounds of rejection:

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

6. Claims 14-16, 18, 20-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sobkin et al. (6,555,600) in view of Lozano et al. (6,033,599) and Cha et al (5,156,769).

Regarding claims 14-16, 18, 20-22 and 24, Sobkin et al. discloses a volatile corrosion inhibitor to be blended into a molding material having a thermoplastic resin as a principal base material and comprising: a nitrous acid metal salt having a melting point

Art Unit: 1796

not less than a softening temperature of the thermoplastic resin; a benzoic acid salt; a saturated polycarboxylic acid or a metal salt thereof; and an anticorrosive component for nonferrous metals, wherein the saturated polycarboxylic acid is at least one selected from a group consisting of sebacic acid and dodecanedioic acid. The nitrous acid metal salt being sodium nitrite; the saturated polycarboxylic acid or a metal salt thereof being sodium sebacate (abstract, column 1, line 65 to column 2, line 8).

Sobkin et al. does not disclose the benzoic acid salt is selected from a group consisting of an alkali metal salt and an alkaline earth metal salt of benzoic acid nor does Sobkin et al. disclose the anticorrosive component for non-ferrous metals is at least one selected from a group consisting of alkali metal salts, alkaline earth metal salts, and zinc salts of benzotriazole; alkali metal salts, alkaline earth metal salts, and zinc salts of methylbenzotriazol; 2- mercaptobenzothiazole, 2-benzothiazolylthioacetic acid, 3-2-benzothiazolylthiopropionic acid, 2,4,6-trimercapto-s-triazine, 2-dibutylamino-4,6-dimercapto-s-triazine, and alkali metal salts, alkaline earth metal salts, and zinc salts thereof.

However, Lozano et al. also discloses a volatile corrosion inhibitor composition to be blended into a thermoplastic resin as a principal base material includes alkali metal salt or alkaline earth metal salt of benzoic acid as a vapor corrosion inhibitor that is effective at high temperature and is non-toxic (abstract and column 2, lines 10-23).

Cha et al discloses corrosion inhibitor compositions useful for inhibiting the corrosion of copper and copper alloy metals, the composition comprising tolyltriazole, benzotriazole and salts thereof, specifically sodium and potassium salts (col 3, ln 5-10).

Art Unit: 1796

It would have been obvious to one having ordinary skill in the art at the time the applicant's invention was made to provide the alkali metal salt or alkaline earth metal salt of benzoic acid as taught by Lozano et al. and tolyltriazole, benzotriazole and their salts as taught by Cha et al, with the volatile corrosion inhibitor of Sobkin et al., in order to provide corrosion protection against iron, metals containing iron, copper and metals containing copper for long term use and storage of molded articles.

Regarding claim 23, Lozano et al. discloses the thermoplastic resin includes polyethylene or polypropylene (column 4, lines 29-30).

Regarding claims 25-29, both Sobkin et al. and Lozano et al. disclose a volatile anticorrosive film or sheet and the method for using of the a volatile anticorrosive film or sheet for protection of metallic articles in storage and shipping (Sobkin et al. column 14, lines 1-63, examples and Lozano et al. column 1, lines 10-36).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Haidung D. Nguyen whose telephone number is (571)270-5455. The examiner can normally be reached on M-Th: 9:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on 571-272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1796

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Harold Y Pyon/
Supervisory Patent Examiner, Art
Unit 1796

\HN\